



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,837	11/13/2001	Huang-Tsun Chen	MR3029-4	6197

4586 7590 11/26/2004

ROSENBERG, KLEIN & LEE  
3458 ELLICOTT CENTER DRIVE-SUITE 101  
ELLICOTT CITY, MD 21043

EXAMINER

YE, LIN

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/986,837

Applicant(s)

CHEN, HUANG-TSUN

Examiner

Lin Ye

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 2,3,6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The Figures 1-2 are objected to under 37 CFR 1.84(o). Drawings submitted to the Office must be suitable descriptive legends may be used subject to approval by the Office, or may be required by the examiner where necessary for understanding of the drawing. They should contain as few words as possible.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

2. Claims 2-3 and 6-5 objected to because of the following informalities:

Referring to claims 2-3 and 6-5, the claims states "the memory is a **volatile** memory" and "said **volatile** memory is a compact flash" in the multiple function memory card. However, the applicant's abstract (page 13, line 11) and specification (page 4, lines 9-10, and lines 21-23) disclose, "the multiple function memory card is a **nonvolatile** memory... Data, which are save in the multiple function memory card, **will not be lost** following a power of the personal digital assistant will be closed". In the specification (page 7, lines 15-16) also discloses "a **nonvolatile** memory, such as: compact flash". It is known that the data in the volatile memory will be lost when the power is off.

Art Unit: 2615

The examiner also had an interview with applicant's attorney, Jun Lee on November 23, 2004. The attorney confirmed the "volatile" is typing-graphic error. The memory should be a **nonvolatile** memory in the multiple function memory card.

For this reason, the examiner will consider the memory is a **nonvolatile** memory that claimed in the claims 2-3 and 6-5.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Wilska et al. U.S. Patent 6,427,078.

Referring to claim 1, the Wilska reference discloses in Figures 1-5, an apparatus of a multiple function memory card (e.g., the PCMCIA card are standardized cards which has multiple function, such as memory cards function and expansion cards functions, i.e. for input/output cards used in notebook and camera, see Col.4, lines 6-9, and lines 19-21), which is a fixed (integrated) in a digital camera (e.g., as shown in Figures 4-5, camera card 15 as a digital camera includes CCD image sensor 14a and memory units 24. The memory card and

Art Unit: 2615

digital camera are integrated together, see Col. 3, lines 24-25 and Col. 4, lines 25-30), said apparatus comprises: a data/signal control unit (e.g., microprocessor 23 connected with the PCMCIA interface 22, see Col. 4, lines 57-58), said data/signal control unit (23) being connected with said digital camera (camera unit 14a inside of digital camera 15) and a personal digital assistant (PDA) (e.g., a small, portable and hand-held notebook computer 1 has 170mmx85mmx30mm and 800g less, see Col. 2, lines 32-37. It can be consider as a personal digital assistant) to transmit an image datum, which is produced from said digital camera (e.g., the microprocessor 23 controls and read the desired image information from memory unit 24 of camera 15, and the image information is transmitted to the PDA 1, see Col. 4, lines 55-62); and a memory (24), said memory being connected with said data/signal control unit (23) and said personal digital assistant (PDA 1) to save a backupped datum of said personal digital assistant and said image datum (e.g., after the image data transmitted to the PDA 1, the PDA 1 can edit the picture; the modified picture data and other datum such as drawing , text or business card information can also be **recorded again** in memory unit 24 of camera 15 as backupped datum of the PDA 1, see Col. 5, lines 1-5 and Col. 5, lines 25-35).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2615

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. U.S. Patent 6,427,078 in view of Safai et al. U.S. Patent 6,167,469.

Referring to claim 2, the Wilska ('078) reference discloses all subject matter as discussed with respected to same comment as with claim 1, and the Wilska ('078) a reference discloses the memory (24) comprises two kinds of memory units: volatile memory unit for storing image data and nonvolatile memory unit, such as compact flash (FLASH) for program memories; and the battery (21) is mainly used to ensure the images are maintained in the volatile memory when the memory card is detached from the card slot (See Col. 4, lines 37-47). However, the Wilska ('078) reference does not explicitly states the nonvolatile memory units also can store the image data produced from the digital camera.

The Safai ('469) teaches in Figures 1-2, a compact personal handheld digital camera (100); in Figure 2 is a block diagram as physical and logical components of the digital camera (100), a memory card (storage devices 212) is fixed in the digital camera (100). The memory card is a flash memory card that provides nonvolatile storage of digital images taken by the digital camera (See Col. 6, lines 1-5). The Safai ('469) reference is evidence that one of ordinary skill in the art at the time to see more advantages the digital camera system using a nonvolatile memory, such as compact flash memory to record the image so that the memory card does not need additional backup battery for avoiding image lost when the system power is off and significantly reduce the size of memory card. For that reason, it would have been obvious to one of ordinary skill in the art to modify the system of Wilska ('078) by providing a non-volatile memory unit for storing the image data produced from the digital camera as taught by Safai ('469).

Art Unit: 2615

Referring to claim 3, the Safai ('469) reference discloses wherein said nonvolatile memory (212) is a compact flash (a flash memory, see col. 6, lines 1-5)

Referring to claim 4, the Safai ('469) reference discloses wherein said memory can be used to save said image datum forever (e.g., the memory 212 is a non-volatile storage so the image data is saved forever without effecting by the power off).

7. Claim 5 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. U.S. Patent 6,427,078 in view of Maruyama et al. U.S. Patent 6,760,074.

Referring to claim 5, the Wilska ('078) reference discloses in Figures 1-5, an apparatus of a multiple function memory card (e.g., the PCMCIA card are standardized cards which has multiple function, such as memory cards function and expansion cards functions, i.e. for input/output cards used in notebook and camera, see Col.4, lines 6-9, and lines 19-21), which is a fixed (integrated) in a digital camera (e.g., as shown in Figures 4-5, camera card 15 as a digital camera includes CCD image sensor 14a and memory units 24. The memory card and digital camera are integrated together, see Col. 3, lines 24-25 and Col. 4, lines 25-30) and is used in a personal digital assistant (PDA)(e.g., a small, portable and hand-held notebook computer 1 has 170mmx85mmx30mm and 800g less, see Col. 2, lines 32-37. It can be consider as a personal digital assistant), said apparatus comprises: a data/signal control unit (e.g., microprocessor 23 connected with the PCMCIA interface 22, see Col. 4, lines 57-58), said data/signal control unit (23) being connected with said digital camera (camera unit 14a inside of digital camera 15) and a personal digital assistant (e.g., a small, portable and hand-held notebook computer 1 has 170mmx85mmx30 and 800g less, see Col. 2, lines 32-37. It

Art Unit: 2615

can be consider as a personal digital assistant) to transmit an image datum, which is produced from said digital camera (e.g., the microprocessor 23 controls and read the desired image information from memory unit 24 of camera 15, and the image information is transmitted to the PDA 1, see Col. 4, lines 55-62); said personal digital assistant (PDA 1) comprising a driver (input/output controller 5, see Col. 2, lines 43-44), that detects said multiple function memory card (when the 15b inserting in the PCMCIA card slot 16, see Col. 3, lines 28-30); and a memory (24) said memory being connected with said data/signal control unit (23) and said personal digital assistant (PDA 1) to save a backuped datum of said personal digital assistant and said image datum (e.g., after the image data transmitted to the PDA 1, the PDA 1 can edit the picture; the modified picture data and other datum such drawing, text or business card information can also be **recorded again** in memory unit 24 of camera 15 as backuped datum of PDA 1, see Col. 5, lines 1-5 and Col. 5, lines 25-35). However, the Wilska ('078) reference does not explicitly show a mode selection unit for the system can provide a digital camera mode and datum memory mode (PDA function mode) for a user, so that user can select digital camera mode for recoding image to the memory card and a datum memory mode for storing the backuped datum of the PDA to the memory card.

The Maruyama ('074) teaches in Figures 1 and 5, a portable electronic computer apparatus has both digital camera and personal digital assistant (PDA) functions; it comprising a mode switching lever (12, see Col. 10, lines 20-21), when switching lever 12 is moved in the direction of arrow B shown in Figure 1 as digital camera mode selected, when switching lever 12 is moved the opposite direction as PDA function mode selected (See Col. 10, lines 27-41); and build in memory (extension unit 1000), including flash memory (26)



Art Unit: 2615

supplemented in the apparatus for storing the image data captured by the digital camera section when the digital camera mode selected and storing the datum, such as security codes, data received from remote external device to the memory when the PDA mode (as datum memory mode) selected by switching lever 12 (See Col. 11, lines 27-30, and 38-61). The Maruyama ('074) reference is evidence that one of ordinary skill in the art at the time to see more advantages the portable computer system has the mode selection unit to let user has more flexible options to select a desired mode, such digital camera mode or PDA mode so that the system can consume less than energy of battery for prolonging usable time of the portable computer (See Col. 2, lines 42-43). For that reason, it would have been obvious to one of ordinary skill in the art to modify the system of Wilska ('078) by providing a mode selection unit for the user that can select digital camera mode for storing image of the camera to the memory card and a datum memory mode (PDA function mode) for storing the backup datum of the PDA to the memory card as taught by Maruyama ('074).

Referring to claim 8, the Wilska ('078) and Maruyama ('074) references disclose all subject matter as discussed with respected to same comment as with claim 5, and the Wilska ('078) reference discloses wherein said memory can be used to save said image datum forever (e.g., the memory unit 24 has battery 21 is mainly used to ensure the images are maintained in the memory forever even the memory card is detached form the card slot, see Col. 4, lines 43-47).

Referring to claim 9, the Wilska ('078) and Maruyama ('074) references disclose all subject matter as discussed with respected to same comment as with claim 5, and the Wilska ('078) reference discloses wherein said memory can be used to save backup datum forever

Art Unit: 2615

(e.g., the modified picture data and other datum such drawing, text or business card information can also be **recorded again** in memory unit 24 of camera 15 as backup datum of PDA 1, because the memory unit 24 has battery 21 is mainly used to ensure the data maintained in the memory forever even the power of PDA will be closed, see Col. 4, lines 43-47, Col. 5, lines 1-5 and Col. 5, lines 25-35).

8. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. U.S. Patent 6,427,078 in view of Maruyama et al. U.S. Patent 6,760,074 and Safai et al. U.S. Patent 6,167,469.

Referring to claim 6, the Wilska ('078) and Maruyama ('074) references disclose all subject matter as discussed with respected to same comment as with claim 5, and the Wilska ('078) a reference discloses the memory (24) comprises two kinds of memory units: volatile memory unit for storing image data and nonvolatile memory unit, such as compact flash (FLASH) for program memories; and the battery (21) is mainly used to ensure the images are maintained in the volatile memory when the memory card is detached from the card slot (See Col. 4, lines 37-47). However, the Wilska ('078) reference does not explicitly states the nonvolatile memory units also can store the image data produced from the digital camera.

The Safai ('469) teaches in Figures 1-2, a compact personal handheld digital camera (100); in Figure 2 is a block diagram as physical and logical components of the digital camera (100), a memory card (storage devices 212) is fixed in the digital camera (100). The memory card is a flash memory card that provides nonvolatile storage of digital images taken by the digital camera (See Col. 6, lines 1-5). The Safai ('469) reference is evidence that one

Art Unit: 2615

of ordinary skill in the art at the time to see more advantages the digital camera system using a nonvolatile memory, such as compact flash memory to record the image so that the memory card does not need additional backup battery for avoiding image lost when the system power is off and significantly reduce the size of memory card. For that reason, it would have been obvious to one of ordinary skill in the art to modify the system of Wilska ('078) by providing a non-volatile memory unit for storing the image data produced from the digital camera as taught by Safai ('469).

Referring to claim 7, the Safai ('469) reference discloses wherein said nonvolatile memory (212) is a compact flash (a flash memory, see col. 6, lines 1-5).

### *Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Narayanaswami et al. U.S 6,657,654 discloses an attachment apparatus for a handheld computer having a camera and PDA sections.
  - b. Parulski et al. U.S. 5,666,159 discloses an electronic camera system includes a programmable transmission capability.
  - c. Etoh U.S. 5,729,289 discloses a memory card fixed in the camera.

Art Unit: 2615

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (703) 305-3250. The examiner can normally be reached on Mon-Fri from 8:00AM-5:00PM.

---

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew B Christensen can be reached on (703) 308-9644. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lin Ye  
Examiner  
Art Unit 2615

November 23, 2004